

# **Patterns of Executing Budgeting as a Tool of Planning and Control: with Special Reference to Listed Companies in Sri Lanka**

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## ***Abstract***

*In the modern business world, budgets accomplish a significant role both in the planning and control of businesses towards attaining organizational goals. The purpose of this study is to investigate patterns of executing budgeting techniques by different companies/industry sectors, in realizing intended purposes. Applying Mixed Method Research (MMR) approach, data for this study was collected through a questionnaire survey and discussions with financial executives of 42 listed companies representing five industry sectors. Given the major types of simultaneous and sequential eight paradigms of mixed methods designs, this research is concerned with two paradigms QUAN + qual and QUAN → qual. The survey data were analyzed using SPSS software and frequency tables while employing 'thematic analysis' and 'content analysis' for descriptive data. It identified 'results point of interface' as the suitable position for integrating core component 'QUAN' and supplemental component 'qual' to provide meaningful interpretations and sound conclusions for the study. Patterns of application of budgeting vary to a considerable extent from one another within the industry and between industries. Such differences may be largely attributed to the nature of businesses, the impact of environmental changes on business activities, markets served (local or foreign), policies, procedures, and specific circumstances that individual companies exercised. Thus, it suggests that these factors may have an impact on the patterns of budgeting practices adopted by individual companies/ industry sectors. Findings conclude that budgeting seems to be the most important technique for all companies irrespective of their sector, playing the biggest role for planning than control of business activities. This study provides helpful insights and useful guidelines to business entities who are practicing under different organizational contexts and influences signifying different industry sectors, in applying certain management accounting techniques i.e. budgeting in a proper way making sure that they are moving on to right directions towards achieving organizational goals and hence business sustainability.*

*Keywords: Budgeting, control, industry sectors, listed companies, planning.*

## 1. Introduction

As the modern business world is highly competitive, business firms must become more competitive on a global basis to survive in businesses. Management Accounting (MA) literature thus suggests that effective planning and control are vital in achieving organizational goals and objectives. Effective planning ensures that goals are selected with care and effective control confirms that the selected plans are implemented properly. In this respect, budgets accomplish a significant role both in planning and control in attaining organizational goals (Herath & Indrani, 2007). Trimisiu Tunji (2013) stated that firms seek to adopt the concept of budgeting and budgetary control to satisfy their needs at the least possible costs. It recognizes budgeting as a useful tool that guides firms to evaluate whether their goals and objectives are actualized.

However, Tuanmat and Smith (2011) emphasize that, as the business environment has been changing continuously, it is critical to ensure that an appropriate MA system is practiced in organizations. In view of the changing environment in which firms now operate Trimisiu Tunji (2013) also indicated that budgets, as a continuous management activity, should adapt to changes in the dynamic business environment. This is important because an effective management accounting system (MAS) can help managers to better coordinate business activities and provide useful information for them to make

decisions, and this process will ultimately improve organizational performance (Tuanmat & Smith, 2011). In this respect, Trimisiu Tunji (2013) emphasized that a dedicated work force, improved technology and effective policies (budgeting inclusive) help manufacturing companies to remain effective and efficient in fulfilling their stewardship obligations to the stakeholders.

It is generally accepted that ‘the social system consists of different sub-systems/components each having different characteristics so that if we want to identify those characteristics, we should investigate each sub- systems/components separately’. In this sense, it is realized that businesses may vary from one another within the industry and also between industries, in terms of the nature of products, product diversification, markets served (i.e., domestic or export), market position (market leader or non-leader), length of operations in years, size (large, medium, or small), policies, procedures, objectives and specific circumstances that individual companies face. All of these may have an impact on the extent and patterns of implementing certain MA techniques like budgeting in an organization.

Thus, this study attempts to investigate patterns of applying budgeting techniques by 42 listed companies dealing with different types of businesses under

different organizational contexts and influences, representing different industry sectors (five), however, all are signifying manufacturing and manufacturing-related sectors. In this sense, the findings of this study will provide helpful insights and useful guidelines to organizations facing with changing business environment and having different characteristics their own, especially those executives who are responsible for making sure that their companies move on to right directions by applying most essential MA techniques such as budgeting suitably towards achieving organizational goals and hence business sustainability.

## **2. Research objectives and methodology**

### ***2.1 Research objectives***

The main objective of this study is to investigate patterns of executing budgeting technique by listed companies representing different industry sectors in the Sri Lankan context, stressing associated similarities and differences among sectors, with regard to purposes of budgeting, frequency of forecasting budgets, bases for formulating budget estimates, necessity and frequency of budget revision, and application of Activity-based budgeting (ABB).

### ***2.2 Methodology***

This study applies a Mixed Method Research (MMR) mainly based on the MMR designs made by Morse (2010). It is vibrant that there

are strengths and weaknesses in both quantitative and qualitative research methods so that one possible reaction to this is to suggest combining them in 'mixed methods research'. Such a strategy would seem to allow the various strengths to be capitalized upon and the weaknesses offset (Bryman & Bell, 2007). This MMR approach thus supports the researcher in collecting and analyzing both quantitative and qualitative data to acquire meaningful findings and hence reach sound conclusions.

### ***2.2.1 Sample and population***

By applying the multi-stage purposeful random sampling technique, the researcher first, purposefully selected five industry sectors representing manufacturing and manufacturing-related industries, from 20 sectors listed on Colombo Stock Exchange. Because the researcher realized that the practices of these five sectors are more relevant for this study than other sectors such as telecommunications and banking.

As many MMR studies do, then it applied non-random sampling methods called snowball sampling, convenience sampling, and purposeful sampling in selecting the most suitable accessible sampled companies from the designated industry sectors. In this sampling process, it considered factors such as accessibility to companies, the relevance of businesses of companies to the research area, and nature of data and information required. Snowball sampling is a form of a convenience

sample, because, with this approach, the researcher makes initial contact with a small group of people relevant to the research topic and then uses these to establish contacts with others (Bryman & Bell, 2007).

Accordingly, sometimes the researcher could call on other companies through links already established with responding companies who were initially contacted for the same purpose. Convenience sampling denotes choosing individuals who are conveniently available and willing to participate in the survey (Onwuegbuzie & Collins, 2007). Utilizing these sampling methods, the researcher selected 42 appropriate companies representing five industry sectors: Food Beverages & Tobacco - F & B (8/22), Chemicals & Pharmaceuticals - CHEM (3/12), Diversified Holdings - DVS (5/16), Manufacturing –MNF (18/39), and

Plantation- PLT (8/20) accumulating to the population of 109 companies.

### 2.2.2 Personnel involved in the survey

The researcher then contacted suitable respondents giving priority to executive level management i.e. finance manager, deputy general manager (DGM) finance, finance controller, finance director (signifying approximately 80% of respondents) than the middle-level management like management accountants and financial accountants from sampled companies (see Table 1). This strategy helps to maximise understanding of the underlying phenomena while obtaining the required data for the study with adequate accuracy and completeness. Because senior management is typically competent to provide more descriptive-analytical answers to questions with their vast knowledge and experience.

Table 1 Management personnel involved in the survey

| Industry sectors | Number of Companies |      |     |         | Total |
|------------------|---------------------|------|-----|---------|-------|
|                  | SM                  | MA   | FA  | MA + FA |       |
| F&B              | 5                   | 2    | 0   | 1       | 8     |
| CHEM             | 0                   | 3    | 0   | 0       | 3     |
| DVS              | 5                   | 0    | 0   | 0       | 5     |
| MNF              | 17                  | 0    | 1   | 0       | 18    |
| PLT              | 7                   | 0    | 0   | 1       | 8     |
| Total            | 34                  | 5    | 1   | 2       | 42    |
| %                | 81                  | 11.9 | 2.4 | 4.8     | 100   |

**Notes:** SM-Senior management; MA-Management accountant; FA-Financial accountant; MA+FA - both Management accountant and financial accountant

### 2.2.3 Data collection

Data collection was undertaken using two instruments: questionnaire survey and discussions. In the MMR approach, it was intended to obtain more clarifications and descriptive information apart from the core data, particularly relating to specific circumstances that individual companies face. It applied a personal visit approach to every company in the sample to maintain a sound response rate (100%) and the quality of data typically contacted financial executives of companies and, if they were not available, then contacted management accountants/ cost accountants or financial accountants. It also collected secondary data through available sources: policy documents; annual reports; budgets; variance analysis reports; and explored websites of companies for background information before starting company visits.

Deliberating the MMR designs of Morse (2010), for this study, the core component is identified as 'QUAN' and the supplemental component as '*qual*'. Accordingly, data collection took place in two ways for primary data: i) collecting core data for QUAN, through the survey and ii) collecting supplementary *qual* data through discussions made concurrently and subsequent to the survey. Given the major types of simultaneous and sequential mixed methods designs by Morse (2010, p. 341), this research is concerned with two paradigms (out of eight paradigms) in respect of methods and strategies applied, indicated as QUAN + *qual*

and QUAN → *qual*, respectively. Here, the theoretical drive is indicated with 'uppercase' and supplemental strategy with 'lowercase'.

#### i) *Collecting core data for QUAN:*

Before visiting companies, relevant officials of each company were contacted by e-mail or telephone and made relationships with them, and then sent those questionnaires with a summary of research aims. Upon receiving respondents' responses, appointments were made with them for the survey. Accordingly, the researcher actively participated in and was able to complete the survey of 42 companies by maintaining a 100% response rate.

#### ii) *Collecting supplementary qual data:*

This involved discussions with respondents made in two stages: QUAN + *qual* and QUAN → *qual*. The first stage (QUAN + *qual*) comprised discussions conducted simultaneously with the same respondents who participated in the questionnaire survey. In this stage, the researcher spent approximately two hours in each company and filled questionnaires while continuing discussions with respondents. As the respondents were sent the questionnaire in advance, the researcher could have fruitful discussions with officials with a proper understanding of the questions and anticipated investigations. In the second stage (QUAN → *qual*), depending on the situations, availability of personnel and information requirements, time

constraints/ interest of respondents to provide more details; which were identified in the QUAN + *qual* stage, the researcher conducted further discussions with officials, when required and thus, not all companies were involved. Accordingly, the second stage

discussions were made with officials as shown in Table 2. As a result, subsequent discussions were conducted with financial executives/ accountants, taking advantage of their thorough knowledge and experience in the area of concern.

Table 2 Discussions made with officials of sampled companies subsequent to the survey

| Industry sector | No. of Companies involved in discussions | Respondents                              | Time spent (hours) | At what time |
|-----------------|--|--|--------------------|--------------|
| F & B           | 3  | Finance controller                       | 1 1/2              | A            |
|                 |  | Finance director                         | 2                  | B            |
|                 |  | General Manager (specialist in finance ) | 1                  | B            |
| CHEM            | 1  | Management accountant                    | 2 1/2              | A            |
| DVS             | 3  | Finance manager                          | 1 1/4              | A            |
|                 |  | Finance manager                          |                    | B            |
|                 |  | Finance director                         | 2                  | B            |
| MNF             | 5  |  | 1 1/2              |              |
|                 |  | Finance manager                          | 2                  | B            |
|                 |  | Finance director                         | 1 1/4              | A            |
|                 |  | DGM Finance                              | 1                  | B            |
|                 |  | Finance controller                       | 1 1/2              | A            |
| PLT             | 2  | Finance manager                          | 2                  | A            |
|                 |  | DGM (Finance)                            | 3                  | B            |
|                 |  | Finance controller                       | 2 1/2              | B            |
| Total           | 14                                       |  | 25                 |              |

Notes: **A** – same day just after the survey; **B**- Another day with appointment after the survey

With these discussions made concurrently and subsequent to the survey, the researcher empowered to obtain further information with more clarifications and examples, details about specific situations faced by individual companies/ industry sector, that are essential for making expressive complete interpretations and findings and then reaching sound conclusions for the study.

#### 2.2.4 Data analysis

The survey data were tabulated and analyzed using SPSS software, and frequency tables while employing ‘thematic analysis and ‘content analysis’ for descriptive data. According to Morse (2010), two points of interfaces are available in MMR design for integrating core and supplemental components to form a meaningful complete analysis and interpretations: ‘*analytical point of interface*’ that concerns with transforming *qual* data

into numerical form; and '*results point of interface*' that adding *qual* data to QUAN results. Of these, the researcher recognized '*results point of interface*' as the suitable position for integrating core component 'QUAN' and supplemental component '*qual*'. Because the qualitative data and information could not be transformed into numerical form, nevertheless they are suitable for adding to QUAN results to provide descriptive analysis and interpretations for the study. The researcher was motivated to use MMR approach to the study as it helps produce complete and expressive analysis and thorough interpretation of findings.

### 3. Literature review

In the changing business environment, it is critical to ensure that an appropriate MA system is practiced in organizations (Tuanmat & Smith, 2011). Literature review specifies that traditional MA techniques like budgeting is still important as an effective planning and control tool that enable management for improving performance and hence achieving organizational goals and objectives. Abdel-Kader and Luther (2006), demonstrated that budgeting for planning and controlling costs, product profitability analysis, and performance evaluation based on financial measures are shown to receive the greatest emphasis, ratifying that traditional MA is very much alive.

In contrast, Sulaiman, Ahmad, and Alwi (2004), in a literature review of four Asian countries: Singapore, Malaysia, China,

and India, suggest that traditional MA techniques such as traditional budgeting, standard costing, and variance analysis were seen to be less useful in the present manufacturing environment. Overall, the reviewed evidence suggests that the use of contemporary MA tools is lacking, while the use of traditional MA tools remains strong in these four countries (Sulaiman et al., 2004).

Waweru, Hoque & Uliana (2005), in a survey of listed companies in South Africa, presented somewhat different ideas that modern MA techniques such as activity-based costing (ABC) and balanced scorecard-type performance measures are used together with the traditional MA techniques, such as budgeting and standard costing. Further, the high emphasis on cost management and the widespread use of flexible budgets for control purposes show that those South African firms are striving to reduce waste in their production processes. Further increased use of ABC and emergence of ABB suggest a move towards the elimination of non-value adding activities and hence waste reduction. Contrary to such practice of flexible budgets in South African companies, Abdel-Kader and Luther (2006) found that in the UK almost all companies use budgeting for planning and control, however, they work only with fixed budgets and thus, a high proportion does not flex or amend their budgets for changes in volumes or other factors.

Chenhall and Langfield-Smith (1998), through a survey in large Australian manufacturing firms, revealed that financial

performance measures such as budgeting for controlling costs, budget variance analysis indicated high adoption rates and showed high benefits. The findings ultimately suggest that financial performance measures continue to be an important aspect of MA; however, these are being supplemented with a variety of non-financial measures.

Wijewardena and De Zoysa (1999) revealed that Australian companies place greater emphasis on cost control tools, such as budgeting, standard costing, and variance analysis at the manufacturing stage, while Japanese companies devote greater attention to cost planning and cost reduction tools based on target costing at the product planning and design stage. They concluded that budgeting is considered an equally important MA tool for planning and controlling product costs in both countries. Almost all Australian companies prepare budgets such as profit and loss statements, balance sheets, operating budgets, cash budgets, and capital expenditure budgets, just like Japanese companies.

However, the substantial difference between the two countries is that the balance sheet and capital expenditure budget seems to be less popular in Japan whilst annually prepared budgets are more popular in Australia, as opposed to biannually prepared budgets in Japan. Also, monthly budgets are at a moderate level, while quarterly budgets are to be seen as less important in both countries. The least importance is given to budget preparation beyond one year, showing 4% in Japan and 15% in Australia. Even though, this

does not suggest that Japanese companies are not engaging in long-term planning. Concerning the preparation of long-term plans, more concentration is given by Japanese companies (95%) than their Australian counterparts (83%).

Onyiah, Ezeamama, Ugwu & Mgbodile (2016) exploring Ministries, Departments, and Agencies in Nigeria suggest that a budget is a veritable tool for planning, controlling, communicating, decision making and value creation, stressing the necessity of making efforts to ensure that all agencies tolerate strictly to the *Budget Implementation Reform Strategies*. In this concern, Segun and Olamide (2009) emphasize that though the budgeting system is not perfect, budgeting is perceived by managers as a useful exercise and a value creation process.

Accordingly, empirical evidence induces that budgeting is an absolute tool for planning, controlling, coordinating, communicating, evaluating, and improving performance and decision making. On the other hand, some specialists have mounted wide-ranging criticism of how budgetary systems are typically implemented, claiming that budgeting is not a worthwhile exercise, no added value to organizations, managers are dissatisfied with it, and therefore it should be abandoned (Segun & Olamide, 2009). In line with these, Senoo (2018) cited that even though budgeting is at the core of management control systems (MCS), it has been constantly subjected to criticisms. Segun and Olamide (2009), however, contended that budgeting is

perceived by managers as a worthwhile exercise and a value creation process.

Also, companies in Nigeria operate budgets annually, thereby confirming their widespread use. Besides, budgeting is a veritable tool for planning, control, communicating, decision making, and value creation. Thus, they recommend that research should be directed towards improving the budgetary system rather than abandoning it (Segun & Olamide, 2009). In this sense, as cited by Segun and Olamide (2009), it is assumed in the literature that budgeting is a veritable tool for effective management (Grifel, 1993; Lucey, 2000; Millar, 1997; Otley, 1978; Schwartz, Nikias, & Young, 2008; Yeung, 2006).

Advocates of budgeting further convince that the budgeting process forces a manager to become a better administrator and places planning on the front position of the manager's mind. Meanwhile, many healthy businesses dropdown probably because managers could not identify problems in advance or they failed to monitor and adjust budgets to changing conditions (Horngren, Sundem, Stratton, Burgstahler, & Schatzberg, 2008). Given the modern changing business environment, Tuanmat and Smith (2011) also emphasized that it is critical to ensure that an appropriate MA system is practiced in organizations. However, considering the changing environment in which firms now operate, Trimisiu Tunji (2013) illustrates that a budget, as a continuous management

activity, should adapt to changes in the dynamic business environment.

Considering the literature, overall, it evidences that even though budgeting is subjected to criticisms, most companies in different countries adopt budgeting technique as an essential tool for planning and control, but the level and patterns of application and the importance they have given for the technique seem to be different, all of which affect the success or failure of the business. Thus, investigating patterns of budgeting practices is vital for any business entity to identify its strengths and weaknesses and to take measures to improve the practices towards achieving intended purposes.

Libby and Lindsay (2010) stated that most companies practiced budgeting and responded that it has some influence. Exploring patterns in budgeting practices of North-American organizations, they found that majority of firms continues budgeting system for control purposes and is supposed to be value-added. However, problems exist with budgets, still most companies have no plans to abandon this practice, instead many are planning to take steps to improve their budgeting systems to overcome some of the common criticisms.

Supporting these arguments, Barasa, Cleary, Molyneux, and English (2017) based on a case study in public hospitals in Kenya, disclosed that the budgeting and planning process was characterized by lack of alignment, inadequate role clarity, and the use

of informal priority-setting criteria. Also, decision making in both hospitals did not result in the reallocation of resources. It implies that budget revision was not practiced in these hospitals. The authors suggest that public hospitals in Kenya need to improve their budgeting and planning processes by harmonizing these processes, improving role clarity, using explicit priority-setting criteria.

Investigating budgeting patterns of companies listed on Tokyo Stock Exchange, Senoo (2018) classified budgeting practices into three patterns: flexible, strategic, and poor budgeting; and identified that these patterns differ from the characteristics of “*Japanese-style*” budgeting noted in the literature. Senoo also stated that the types of patterns for control practice linkages in general companies remain unclear. Scott and Enu-Kwesi (2018) analyzing the role of budgeting in the district assemblies of Ghana towards service delivery, showed that citizens rated service delivery poorly, while district assembly officials rated service delivery as satisfactory. However, the study recognized that budgeting practices had a positive significant influence on service delivery.

Further, Sponem and Lambert (2016) identified five patterns of budget practices; each of these clusters displays different budget roles, criticisms and different levels of satisfaction. i) The yardstick budget: assemble both top and operational managers on strategy in the long run, and encourages them to closely follow its deployment in the short run; ii) The coercive budget serves

management by objectives approach; iii) A loose budget is a tool for positioning the strategy; iv) The interactive budget combines management-by-objectives and strategy deployment; and (v) Indicative budget which is the opposite of interactive budget.

The indicative budget has no noticeably defined function. Both interactive and coercive budgets are used to evaluate and reward. The interactive budget operates as a dominant tool to structure negotiations and discusses strategic choices, producing high budget satisfaction and slight criticism: hence, legitimate to use it for performance evaluation and reward. The coercive budget, alternatively, does not foster discussion and is perceived as a tool for sanctioning rather than a useful management tool for monitoring business activity. Moreover, Loose and indicative budgets demonstrate a low level of budget evaluation and weak links between the budget and incentives. Analyzing both these clusters they advocated that budget participation and budget flexibility are not sufficient to ensure budget satisfaction (Sponem & Lambert, 2016).

In agreement with Libby and Lindsay (2010), Sponem and Lambert’ (2016) study confirms that using the budget for evaluating performance is not a common practice, and some organizations explicitly link their budget to strategy. Also, the yardstick, coercive and interactive styles of budgets all relate to different forms of ‘budgetary control’ (i.e. the use of the budget to monitor outcomes throughout the year and to evaluate

performance at the end of the year); yet, sometimes, budgets are not used to control, nonetheless play a role in defining strategy (the loose budget).

In this sense, Hope and Fraser (2003) suggest that budgets cannot be designated as a universal, fully standardized, and stable set of tools with standardized use. More specifically, Sponem and Lambert (2016) also confirm that each of the five budget patterns plays a different role and is characterized by a different level of satisfaction. They also endorse the importance of participation and involvement of managers for budget satisfaction; emphasizing the importance of the content of discussions during budget negotiations. In this respect, it convinces that discussing budgets based on action plans and strategic objectives is more satisfying than discussing budgets only on a financial level. In this setting, linking budget satisfaction with the participation, involvement, and deliberation of action plans during budget negotiations advises that individuals are more satisfied with the budget when it is used as a tool for discussion, exchange on business issues, or even socialization within the business (Sponem & Lambert, 2016).

Bouquin (2010) referring to eleven major budget design and use characteristics, categorizes the budgeting process into three sequential stages: drafting stage (before action); steering stage (during the action); and review and evaluation stage (after action) (cited by Sponem & Lambert, 2016). Reviewing literature Sponem and Lambert

(2016) stated that in the drafting stage, organizations combine budgeting with a strategy to varying degrees in budget negotiations; budget rigidity is considered a central characteristic of steering stage (defining budget revision as possibility to change the primarily set budgets and budget reforecast as the existence of a reforecast during the year; which could be joined in various ways); and in the review and evaluation stage, differences can be expected between the significance of budgeting for performance evaluation and importance of budgeting for determining rewards.

Upon identifying the gap in the literature, this study thus explores the patterns of budgeting relating to listed companies representing five different sectors in the Sri Lankan context, mainly focusing on its purposes, frequency of forecasting budgets, bases for formulating budget estimates, budget revision, and application of ABB.

#### **4. Findings and discussions**

Patterns of budgeting practices may vary among sampled companies from one another within the industry and between industries, irrespective of their resemblance through manufacturing and manufacturing-related operations. Upon ascertaining characteristics of the sampled companies, this section continues to analyze and discuss the patterns of budgeting practices for the following aspects whilst stressing associated similarities and differences among sectors.

#### **4.1 Characteristics of the sampled companies**

All companies in the sample deal with the manufacturing and selling of different types of products for local and/or export markets. As illustrated in Table 3, out of 42 sampled companies, the majority is large size and the

lesser is medium size, and the types of businesses are different among sectors. This study demarcates large and medium scale companies following ‘National Policy Framework for Small and Medium Enterprises - SME in Sri Lanka’ (Ministry of Industry and Commerce, 2015) ([www.industry.gov.lk](http://www.industry.gov.lk)).

Table 3 Size of companies and types of businesses by industry sector

| Industry sector | No. of Companies |        | Major products and types of businesses   |
|-----------------|------------------|--------|--|
|                 | Large            | Medium |  |
| F & B           | 6                | 2      | Food and beverage products (dairy products, fruit, coconut and organic products, salt, poultry products; other consumer products)  |
| CHEM            | 2                | 1      | Agro-inputs, chemicals, paints, bituminous products  |
| DVS             | 5                | 0      | Garments; blending and packing tea; baby items, cologne, soaps; other consumer products; toothbrush and toothpaste etc.  |
| MNF             | 10               | 8      | Ceramic products; cables, wires, conductors; aluminium products; refrigerators, washing machines, air conditioners, freezers, sewing machines; rubber products; cement, wall plaster, concrete, tile adhesive, flooring water proofing; pipes, show cases, partitions, ladders, sliding doors and windows, roller shutters, curtain rails, channels etc. |
| PLT             | 8                | 0      | Tea, rubber, coconuts, palm oil, cinnamon etc.   |

Considering accounting systems associated with budgeting practices, all companies are functioning with both MAS and Financial Accounting Systems (FAS). Out of 42 companies, 31 employed management accountants for the function while the rest operating with financial accountants; all of them are, however, carefully monitored by finance executives.

#### **4.2 Patterns of budgeting practices of listed companies**

All companies in the sample apply budgeting in their routine planning and control functions.

These findings are consistent with those of previous studies: Waweru et al. (2005), 98% in South Africa; Hope and Fraser (1998), 99% in Europe; Szychta (2002), 80% in Poland; Abdel-Kader and Luther (2006), almost all companies in the UK; and Wijewardena and De Zoysa (1999), almost all companies in Australia and Japan.

##### **4.2.1 Budget components and frequency of forecasting budgets**

The results obtained pertaining to the forecast period for budget preparation in relation to five major budget components are presented in Table 4.

Table 4 The frequency of forecasting budgets for major components

| Budget components               | Forecast time period (% of Companies applied) |           |               |            |                 |
|---------------------------------|---|-----------|---------------|------------|-----------------|
|                                 | Monthly                                       | Quarterly | Semi-annually | Annually   | Beyond one year |
| Budgeted income statement (BIS) | 100   | 36        | 17            | 100        | 21              |
| Budgeted balance sheet (BBS)    | 90  | 29        | 12            | 100        | 19              |
| Budgeted cash flow (BCF)        | 95  | 29        | 12            | 100        | 17              |
| Operating budgets (OB)          | 100   | 31        | 12            | 100        | 10              |
| Capital expenditure budgets     | 79  | 26        | 12            | 100        | 24              |
| <b>Average Index</b>            | <b>93</b>                                     | <b>30</b> | <b>13</b>     | <b>100</b> | <b>18</b>       |

The findings reveal that basically, all companies (100%) initially prepare annual budgets for all these components and then divide these into monthly and/or quarterly budgets according to their requirements. They all (100%) prepare only BIS and OB monthly, as these two are typically more important for their routine planning and control functions than are others. They give less attention to monthly CEB (79%): as some respondents commented, it is difficult to forecast CEB monthly basis, so instead, they give more attention to useful in managing business day-to-day. Relating to semi-annual budgets, they pay the lowest attention to (13%) in general, nevertheless give more importance to BIS (17%) compared to other components, probably due to their greater concern about the impact of transactions on the income level of the company.

Companies are compelled to prepare quarterly budgets to an extent (30%), because some companies make budget revisions quarterly whilst business processes are going on.

Also, long-run budgets (18%) are more useful than semi-annual budgets (13%). In the long run, they normally prepare budgets for the next three or five years, mostly in summary form, but detailed budgets only for the next first-year beyond one year. In the long term, compared to other components, the highest attention goes to CEB (24%) due to its high practicality and usefulness, whilst the lowest attention is on OB (10%), because it is rather difficult (and indeed useless) to prepare OB beyond one year in a changing business environment. But, in the long-run, CEB is rather useful compared to other components as it associated with a large amount of funds required in the future. Among the industry sectors, there are no significance differences in the frequency of preparing budget components.

However, considering the nature of long term budgets, it identified differences among sectors to a certain extent. For examples, one in the F & B sector prepares only summary budgets, forecasting sales and profit for the next

five years; one in the CHEM sector prepares three-year plan for all components except for OB; In the DVS sector, one multi-national company and one leading company prepare BIS, BBS and CEB budgets for three years and five years respectively. In the MNF sector, one prepares all budgets for three years: the next first year on a monthly basis, and next second and third year on annual basis, and another one prepares all budgets for five years except for OB. In the PLT sector, two companies prepare all budgets for five years as summary estimates.

Similarly, Wijewardena and De Zoysa (1999) find that the budget components considered above were prepared by almost all companies in Australia and Japan, but the considerable difference between these two countries is that the balance sheet and capital expenditure budget are seen to be less popular in Japan. Somewhat deviating from the findings of

this study, they reveal that annual budgets are the most popular in Australia as opposed to biannual budgets in Japan, and monthly budgets are at a moderate level, while quarterly budgets seem to be less important in both Australia and Japan. Also, the least importance was given to long-run budgets, with figures of 4% in Japan and 15% in Australia. Thus, these findings confirm that there seem to be certain differences in the frequency of forecasting different budget components by companies/ sectors within the country and also among countries possibly due to their necessity, policies, and interest of individual companies.

#### 4.2.2 Budget revision and implementation

Implementation of budgets with or without revision and the frequency of revision made by sectors are summarized in Table 5.

Table 5 Implementation of budgets with or without revision

| Industry sector | Implementation of budgets with or without revision |                |                  |                  | Total |
|-----------------|--|----------------|------------------|------------------|-------|
|                 | No revision  | Revise monthly | Revise quarterly | Revise if needed |       |
| F & B           | 2  | 4              | 1                | 1                | 8     |
| CHEM            | 0  | 3              | 0                | 0                | 3     |
| DVS             | 3  | 1              | 1                | 0                | 5     |
| MNF             | 11   | 2              | 5                | 0                | 18    |
| PLT             | 2  | 1              | 4                | 1                | 8     |
| Total           | 18   | 11             | 11               | 2                | 42    |
| Percentage (%)  | 42.9   | 26.2           | 26.2             | 4.8              | 100   |

The findings reveal that all companies discuss progress each month and each quarter at regular board meetings held monthly, however, budget revision takes place depending on their policies, necessity, and applicability. In

view of that, monthly/quarterly revision is at a moderate level (26.2%+ 26.2% = 52.4%) showing equal importance in each. There seem to be considerable differences among sectors with regards to the nature of businesses as

summarized in Table 3. Thus, patterns of the budget revision can be analyzed with regards to nature of businesses across sectors.

Among the five sectors, monthly revisions mostly relates to F & B (50% of companies) and CHEM (100% of companies). As evidenced from Table 3, F & B sector shows a tendency to produce consumer products so that they can revise budgets on monthly basis more easily than do others dealing with durable products i.e. MNF sector. Also, such a highest tendency (100%) in the CHEM sector towards monthly revision may be attributed to its high level of apparent environmental uncertainty with agro- inputs and related products which exhibit a greater impact of weather changes on sales. For example; with regard to specific circumstances seemed in the business, the finance manager of one company in the CHEM sector, dealing with fertilizer and agro-chemicals expressed their experience as:

We essentially require budget revisions, called '*situation based budget revision*' each month due to weather changes. As the weather forecasts strongly affect sales, we normally prepare seasonal-based budgets. Due to unfavourable weather conditions, there would be a drastic decline in sales in some periods. If we couldn't recover budgeted sales in a certain month, then we revise the budget, anticipating achieving targets in the next month, but it further depends on the weather conditions of the coming month too.

Of the five sectors, quarterly revision mostly appears in both MNF (28%) and PLT (50%) sectors. Findings evidence that all in the MNF sector that are practicing with quarterly revision deal with durable products such as cements, cables, tiles, electric items. Considering PLT sector, the highest proportion (50%) indicates quarterly revision probably due to its applicability and specific nature of businesses in the whole sector. Because it is difficult to make monthly revision (12.5%) for crops like tea, rubber, coconuts, and thus, of the sector, 25 % experienced with no revision. Further, such practices that appeared in the PLT sector may be attributed largely to the nature of markets they are dealing with (entirely depend on export markets), where making changes monthly for budgeted sales is rather very difficult and impossible than those dealing with local markets.

It further reveals that, in general, the use of such budget revisions may be attributed to the level of apparent environmental uncertainty experienced in developing countries like Sri Lanka. Waweru et al. (2005) presented similar views, reasoning from environmental uncertainty that flexible budgeting is most widely adopted by South African companies (68.7%) in view of the rapidly changing business environment. Similar situations can further be identified in studies such as Szychta (2002), with 74%, in Poland, and Waweru et al. (2003), where 68% of companies in Kenya use flexible budgets. Accordingly, Waweru et al. (2005) also suggest that the high use of flexible budgets in

South Africa may be attributed to the high levels of perceived environmental uncertainty experienced in developing countries.

As illustrated in Table 5, in contrast, 42.9% of respondents (majority representing MNF sector- 11/18) of the present study use budgeting technique with no revision and thus agreed with the following sentiments:

We do not make changes to initially prepared budgets because, in practice, we have no remarkable changes between actuals and related budgets. We believe that it seems to be a time-consuming task and/or a no-value-added task. However, if any differences occurred, we can identify them with reasons at the monthly board meetings and so we take actions promptly if these deficiencies are controllable.

Also, 60% of the DVS sector experienced no revision. Finance manager of a company in the DVS sector dealing with garments stated as:

We do not need to consider budget revisions because we do not entirely rely on budgets, and thus use budgets basically for financial planning, performance management, and cost control purposes. In planning activities, we mostly use a monthly production plan, which is prepared based on orders placed, demand, style of the customers, employment, and circumstances prevailing in the period, but this plan is not linked to the budget. Thus, more concentration is on customer needs of the

period because as garments, the demand for them and fashion normally change within short periods.

Accordingly, findings realize that the majority in both MNF (61%) and DVS (60%) sectors who are dealing with durable products practice budgeting as a tool of planning and control with no revision to initially prepared budgets. This trend may be largely attributed to the inability and needlessness of applying budget revision to durable products. Moreover, minority in both F & B and PLT sectors (25% representing each sector) experience with no revision, probably due to their policies and procedures. In this concern, however, the finance manager of a leading company for beer products in the F & B sector stated that they implement budgets with no revision due to their nature of products and policies. In line with this, Waweru et al. (2005) pointed out that the UK, as a developed country experiencing a relatively stable economy, justified the widespread use of fixed budgets.

Also, 4.8% of respondents, signifying only in F & B and PLT sectors, reported that they revise budgets (if needed) only if there appear to be considerable differences between the actual and budgeted outcome in the past period considered. But this practice seems to be at a lower level owing 12.5% each by both sectors. In this respect, the respondent in F & B sector mentioned that:

We normally discuss the previous month's progress and present situation in the monthly board meetings and based

on that ground we take decisions on how to coordinate with next month activities.

Supporting this view, Abdel-Kader and Luther (2006) reveal that all most all companies in the UK use budgeting for planning and control, but a high proportion did not amend their budgets for changes in volume or other factors and thus, they work only with fixed budgets, applying ‘*what if*’ analysis fairly frequently. Also, most of the respondents (83%) in the UK identified budgeting as an important part of their long-term strategic planning. Supporting this, Wijewardena and De Zoysa (1999) signposted that budgeting is considered an equally important MA tool for planning and controlling product costs in Australia and Japan.

The above findings thus advocate that the necessity and frequency of budget revision largely rely on the explicit nature of businesses which determine the nature of products,

processes, and markets (normally specified sector-wise), and the policies and procedures of individual companies.

### 4.2.3 Application of activity-based budgeting

As illustrated in Table 6, adoption of ABB in the Sri Lankan context seems to be at a moderate level (52.4%), however, another 11.9% has been given some consideration towards this and 9.5% intend to introduce ABB in the future. In this sense, it shows rather high application compared to previous findings. For example, relating to developing countries i.e., Waweru et al. (2005) -11.7% in South Africa, Joshi (2001) -7% in India; and in developed countries, Abdel-Kader and Luther (2006) found that ABB was considered as important or moderately important by 63% respondents in the UK, and only a few (19%) used it often or very often.

Table 6 Application of activity-based budgeting

| Stages   | Number of Companies |      |     |     |     | Total | Percentage |
|--|---------------------|------|-----|-----|-----|-------|------------|
|  | F&B                 | CHEM | DVS | MNF | PLT |       |            |
| ABB has been introduced                                      | 4                   | 1    | 3   | 6   | 8   | 22    | 52.4       |
| It is intended to introduce ABB                              | 0                   | 0    | 2   | 2   | 0   | 4     | 9.5        |
| Some consideration has been given to introduce ABB in future | 0                   | 1    | 0   | 4   | 0   | 5     | 11.9       |
| A decision has not been taken to introduce ABB               | 3                   | 0    | 0   | 3   | 0   | 6     | 14.3       |
| No discussions so far  | 1                   | 1    | 0   | 3   | 0   | 5     | 11.9       |
| Total  | 8                   | 3    | 5   | 18  | 8   | 42    | 100.0      |

In view of sectors, a specific situation can be seen in the PLT sector reporting 100% application of ABB as of ABC, depending on their needs, applicability and curiosity. In the whole sector, manufacturing processes are going on at different estates spread throughout the country. In this setting, costs can easily be identified and managed in relation to activities taken place in those estates. Then, all in the DVS sector have shown an extensive commitment on ABB - 60% introduced and 40% intend to introduce in future. Attention given by the F & B sector is at a moderate level (50%) whilst less attention shown by the MNF sector (33 1/3%) to implement ABB. Nevertheless, another 33 1/3 in the MNF sector (2+ 4 out of 18) has given some consideration and intends to introduce the technique respectively. Moreover, in percentage, the level of adoption of ABB by the CHEM sector is somewhat similar to that of the MNF sector.

Findings evidence that all companies who apply ABC (20 companies) representing five sectors unsurprisingly apply ABB too, as these two are mostly interrelated. Apart from the integration of ABC and ABB, this study further illustrates a tendency towards adoption of ABB (52.4% - 22/42) rather than ABC (47.6% - 20/42) on average. This suggests that

Sri Lankan companies would rather concern themselves with budgeting than costing, being convinced of the importance of planning rather than control of business processes through costing systems.

This is further confirmed with the facts (see table 9) that budgeting seems to be the most important technique for all companies, irrespective of the type of industry sector and/or of business, playing the biggest role for planning activities and a slightly lesser role for other functions i.e. coordination, control. Consistent with this finding, Abdel-Kader, and Luther (2006) state that in the UK, ABB is seen to be noticeably more important and frequently used than ABC, supporting their general finding that 'budgeting is more valuable than costing'.

#### ***4.2.4 Methods of forecasting sales***

In view of always/often use of following methods for forecasting sales, it realizes that almost all companies (95%) use subjective estimates based on managerial experience, and statistical forecasting seems to be at above-average level (64%). Yet, market research is remarkably low (26%) in Sri Lanka (see Table 7). These findings are consistent with those of Waweru et al. (2005), where 85% of respondents always/often used subjective methods.

Table 7 The patterns of forecasting sales using different methods

| Technique                                      | Number of Companies and percentages |      |     |      |     |      |     |     |     |      | Rank     |
|--|-------------------------------------|------|-----|------|-----|------|-----|-----|-----|------|----------|
|  | (a)                                 | %    | (b) | %    | (c) | %    | (d) | %   | (e) | %    |          |
| Statistical forecasting                        | 15                                  | 35.7 | 12  | 28.6 | 4   | 9.5  | 2   | 4.8 | 9   | 21.4 | <b>2</b> |
| Market research                                | 6                                   | 14.3 | 5   | 11.9 | 18  | 42.9 | 3   | 7.1 | 10  | 23.8 | <b>3</b> |
| Subjective estimates-based on staff experience | 30                                  | 71.4 | 10  | 23.8 | 0   | 0    | 1   | 2.4 | 1   | 2.4  | <b>1</b> |

Notes: 1. (a) Always; (b) Often; (c) Sometimes; (d) Rarely; (e) Never

2. The ranking was based on values obtained by (always\*3) + (often\*2) + (sometimes \* 1)

Of the respondents not undertaking market research, majority represent PLT sector (No-one in the PLT sector use it). Because they mostly deal with export markets and cannot identify their customers in the local market as they sell their brands through brokers (e.g., tea brokers, rubber brokers) so that market research might not be important in the industry. Instead, 75% in the sector always/often use statistical methods based on production targets estimated by estate managers, as their production is mostly equal to sales volume.

Further, one large company in the DVS sector stated that, as they deal only with the export market (the UK, the USA) for garment products, they do not need to undertake market research about sales forecasts. However, this shows different views with other companies/sectors: for example, a company in the CHEM sector that prepares seasonal budgets due to changes in weather conditions stated that a sister company in the group undertakes market research full time to identify demand for agricultural inputs and

product-related issues. They forecast sales using statistical forecasts, subjective experience, and market research data.

Thus, these findings suggest that Sri Lankan companies mostly prefer to use subjective estimates based on experience, probably due to its simplicity, and thus meeting cost/benefit considerations. Also, irrespective of the limited use of statistical methods in South Africa, undoubtedly due to their sophistication and associated costs, this study confirms satisfactory usage of this technique in Sri Lanka. This trend might be due to the solid competition faced by Sri Lankan listed companies both in local and foreign markets. Companies pay less attention to market research, perhaps due to its inapplicability/ needless in certain situations where substantial proportion/ entire sales deal with the export market (i.e. Garments in DVS sector; PLT sector). Moreover, this trend may reinforce the readiness of other sources in Sri Lanka for market information, some of which are publicly available sources.

#### 4.2.5 Bases considered in preparing operational budgets

It appears a low application of zero-based budgeting (ZBB) (33%) in Sri Lanka; instead firms mostly use the previous year's actuals (81%) as a base for preparing operational budgets, as shown in Table 8.

This is not consistent with MA literature, which indicates a high application of

ZBB (58.8%) in South Africa (Waweru et al., 2005). However, Szychta (2002) finds somewhat a similar situation to the Sri Lankan context, in that 38% of companies use ZBB in Poland. Further, the moderate level application of Base 3 (52%) in this study may be attributed to the application of ABB and ABC (which also appear at a moderate level as discussed in the previous section) by those companies.

Table 8 Bases used in preparing operational budgets

| Bases   | Number of Companies |             |            |             |            |    | Total<br>(42) | %<br>(100) |
|---|---------------------|-------------|------------|-------------|------------|----|---------------|------------|
|   | F&B<br>(8)          | CHEM<br>(3) | DVS<br>(5) | MNF<br>(18) | PLT<br>(8) |    |               |            |
| <b>Base 1 -</b><br>Previous years actuals                             | 8                   | 3           | 5          | 13          | 5          | 34 | <b>80.95</b>  |            |
| <b>Base 2 -</b><br>Zero-based budgeting                               | 2                   | 0           | 1          | 7           | 4          | 14 | <b>33.33</b>  |            |
| <b>Base 3 -</b><br>Different activities<br>(Activity based budgeting) | 5                   | 1           | 4          | 7           | 5          | 22 | <b>52.38</b>  |            |

Considering industry sectors, the MNF (39%) and PLT (50%) sectors have shown a higher level of application of ZBB than others. This trend may be attributed to the nature of products these two sectors handle: for example, most in the MNF sector manufacture durable products that typically require ZBB. As agricultural products, the PLT sector usually confronts with changing weather conditions and changes in their production processes that require new budgets in a timely manner, and thus the PLT sector might show a greater application of ZBB compared to other sectors.

Most respondents use more than one technique at the same time to ensure the viability of budgets: for example, fifteen respondents use Bases 1 and 3, six use Bases 1 and 2, and two use all Bases at once. Most respondents indicate that normally they also consider the previous year's actuals as a measure of applicability of budgets when in general they use the other two Bases for this function. Compared to other Bases, ZBB requires much more effort and time, so that meeting cost/benefit requirements might be a problem. However, to avoid deficiencies associated with ZBB, some companies use it,

combining it with either of the other two Bases: for example, six companies use ZBB with Base 1 and three use ZBB with Base 3, or rarely use both options together with ZBB (two companies). A similar situation (use of ZBB with other Bases) can be seen in the

South African companies as reported by Waweru et al. (2005). Supportive of this view, Hope and Fraser (1998) also propose a move towards the adoption of ZBB to counter the deficiencies of incremental budgets.

#### 4.2.6 Purposes of budgeting

The results indicate moderate/high importance relating to all purposes, as shown in Table 9.

Table 9 Importance of budgeting pertaining to different purposes

| Purposes                                       | Number of Companies & percentages |      |          |      | Rank |
|--|-----------------------------------|------|----------|------|------|
|  | High                              | %    | Moderate | %    |      |
| Planning activities                            | 39                                | 92.9 | 3        | 7.1  | 1    |
| Communicating business activities              | 23                                | 54.8 | 19       | 45.2 | 6    |
| Coordinating activities                        | 34                                | 81.0 | 8        | 19.0 | 2    |
| Allocating resources for day-to-day operations | 32                                | 76.2 | 10       | 23.8 | 4    |
| Authorization                                  | 22                                | 52.4 | 20       | 47.6 | 7    |
| Control  | 33                                | 78.6 | 9        | 21.4 | 3    |
| Performance evaluation                         | 29                                | 69.0 | 13       | 31.0 | 5    |
| Motivation                                     | 21                                | 50.0 | 21       | 50.0 | 8    |

Notes: The ranking was based on values obtained by  $(\text{high} \times 3) + (\text{moderate} \times 2)$

It is shown that budgeting seems to be the most important technique for all companies, irrespective of the type of industry sector and/or of business, playing the biggest role for planning activities and a slightly lesser role for coordination, control, and orderly resource allocation functions. However, the least importance appears for motivation. These findings are somewhat different from those of Waweru et al. (2005), where budgeting plays a much greater role in controlling activities of organizations than in motivating managers, while planning is identified as the second important function.

Given the above analysis and discussions, overall this study confirms that all companies practice budgeting mainly for planning, coordinating, control, and resource allocation purposes. It seems certain differences on the popularity and frequency of forecasting various budget components by sectors. Annually (100%), and monthly (93%) budgets are more popular than quarterly (30%), semi-annually (13%), and beyond one year (18%) prepared budgets. The pattern applied is all companies initially prepare annual budgets for all components: budgeted income statement; budgeted balance sheet; budgeted cash flows; operating budgets and

capital expenditure budgets, and then divide these into monthly and quarterly budgets according to their requirements.

All companies discuss progress monthly and quarterly at regular board meetings and revise budgets, as and when required, depending on their specific nature of businesses, environmental changes, necessity, applicability, policies, and procedures of companies. All companies mostly use subjective estimates based on experience due to their simplicity, meeting cost/ benefit criterion. Yet, market research is remarkably low in Sri Lanka perhaps due to its inapplicability/ needless to companies dealing with the export market (i.e. PLT sector) and availability of other sources for market information. Concerning bases used for budget estimates, differences among sectors appear with greater application of ZBB by the PLT sector than other sectors. Further, most companies use more than one base at once ensuring the viability of budgets. Findings suggest that budgeting seems to be the most important technique for all companies irrespective of their sector playing the biggest role for planning than control of businesses.

## **5. Conclusions and implications of the study**

### **5.1 Conclusions**

A sample of 42 companies, representing five industry sectors engage in manufacturing and selling of different types of products for local and/or export markets. The majority (73.8%)

is large size and the rest denotes medium size companies. Budgeting seems to be an essential tool for all, demonstrating its significance mainly for planning, coordinating, control, and resource allocation purposes. However, patterns of the application of budgeting vary to a considerable extent in view of its certain aspects as discussed above, from one another within the industry and between industries. Such differences may be largely attributed to the nature of businesses, the impact of environmental changes on business activities i.e. production and sales, markets served (local or foreign), policies, procedures, and specific circumstances that individual companies exercised. Thus, it suggests that these factors may have an impact on the patterns of budgeting practices adopted by individual companies/ industry sectors.

All companies initially prepare annual budgets for all components considered and then divide these into monthly and/or quarterly budgets according to their requirements. Monthly basis BIS and OB are the most popular budgets among all, due to their greater importance for routine planning and control functions than are others (BBS, BCF, and CEB). Some companies are compelled to prepare quarterly budgets to an extent (30%), as they make budget revisions quarterly whilst business processes are going on. In the long run, irrespective of immaterial differences that prevailed amongst companies, it seems that they normally prepare budgets for the next three or five years, mostly in summary form, but detailed budgets only for the next first-year beyond one year. Compared

to other components, the highest attention goes to CEB (24%) due to its high practicality and usefulness in the long term, dealing with a large amount of funds required in the future, whilst the lowest attention is to OB (10%), probably due to its difficultness and indeed pointlessness to prepare OB beyond one year in a changing business environment.

Even though all companies discuss progress each month and each quarter at regular board meetings held monthly, budget revision takes place depending on their policies, necessity, and applicability to their own businesses. Given the necessity and frequency of budget revision, there seem to be considerable differences among sectors mainly due to their specific nature of businesses, policies, and judgments of management. Monthly/quarterly revision is at a moderate level showing equal importance in each. It concludes that monthly revision is more suitable for companies producing consumer products (i.e. F & B sector) than others dealing with durable products (i.e. MNF sector) and also for businesses facing a high level of apparent environmental uncertainty with agro-inputs and related products (i.e. CHEM sector).

On the other hand, quarterly revision is typically suitable for businesses producing durable products (i.e. MNF sector) than others. Yet, the majority in the sector (11/18 companies) exercise with no revision largely due to its inability and needless of applying budget revision to such durable products. Also, quarterly revision is more practical for

businesses dealing with crops like tea, rubber, coconuts (i.e. PLT sector -50%) probably due to its fitness to inherent nature of businesses. This, in turn, implies that monthly revision is rather not applicable for such businesses (PLT sector only 12.5%). This inaptness further enriches by the fact that the markets those companies deal with: the export markets (PLT sector), where revising monthly for sales is rather very difficult and impossible than those dealing with local markets.

Meanwhile, some are experiencing no revision probably due to their specific nature of products and markets like garments, policies, and opinions of management on the matter (i.e. PLT -25 %; DVS - (60%). It also suggests that 'seasonal-based budgets' and 'situation-based budget revisions' are preferable for CHEM and PLT sectors to cater to demands for their products, as they are experiencing high environmental uncertainty with agro-inputs and agricultural products due to weather changes. Findings thus conclude that there seem to be substantial differences amongst sectors in relation to patterns of budget revision so that necessity and frequency of budget revision largely rely on the explicit nature of businesses and accompanying situations that individual companies/sectors encountered, and policies, procedures, and judgments of individual companies.

Contrary to less application shown in previous studies particularly in developing Countries (i.e. Waweru et al., 2005), overall this study shows a moderate level application

of ABB. Nevertheless, findings confirm that besides the strange application of ABB in the PLT sector (100%, 8/8 companies) as of ABC, conceivably depending on their needs, applicability, and curiosity, in the Sri Lankan context its application seems to be at below-average level (41%, 14 out of 34 representing other four sectors). Conversely, in developed Countries, like the UK (Abdel-Kader & Luther, 2006) indicated rather extensive responsiveness to ABB. Besides the inter-relation between the application of ABB and ABC, in agreement with Abdel-Kader and Luther (2006), it concludes that Sri Lankan companies would rather concern with budgeting than costing, being convinced of the importance of planning rather than control of business processes. This is further confirmed with the facts depicted in Table 9.

In forecasting sales, in consistent with Waweru et al. (2005) (85%), the most popular technique (95%) is 'subjective estimates based on managerial experience mainly due to its simplicity, and thus meeting cost/benefit considerations. Also, irrespective of the limited use of statistical methods in South Africa, this study confirms satisfactory usage of this technique (64%) in Sri Lanka probably due to the solid competition faced by Sri Lankan listed companies both in local and foreign markets. In contrast, companies pay less attention to market research, undoubtedly due to its irrelevance for some companies who are dealing with export markets i.e. PLT sector; garments, and the availability of other sources for market information. In contrast,

some companies demonstrate greater importance engaging in full-time research due to its specific nature of businesses (i.e. CHEM sector dealing with agricultural products) as described in section 4.2.4.

Relating to bases used in preparing operational budgets it appears differences among sectors. The use of ZBB is largely reliant upon the nature of products; showing higher application by PLT and by MNF sectors for agricultural products and durable products respectively, than others. However, most respondents use more than one technique at the same time to ensure the viability of budgets and also to avoid deficiencies associated with ZBB which requires much more effort and time. It further concludes that most respondents consider the previous year's actuals as a measure of applicability of budgets. Given the purposes of budgeting, findings confirm that budgeting seems to be the most important technique for all companies, irrespective of the type of industry sector and/or of business, playing the biggest role for planning activities and a slightly lesser role for control. These findings are somewhat different from those of Waweru et al. (2005).

Findings suggest that patterns of budgeting practices are determined by the management of companies to a considerable extent subject to the nature of businesses, impact of environmental changes on business activities i.e. production and sales, nature of markets served (local or foreign), policies, procedures, and specific circumstances that individual companies exercised. In this sense,

there appear substantial differences within the industry and between industries in view of patterns of the application of budgeting as a tool for planning and control of business activities. Here, it suggests, agreeing with Trimisiu Tunji (2013), that in dealing with budgeting as a continuous management activity for planning and control of businesses, companies should adapt to changes in the dynamic business environment by applying the most appropriate patterns of budgeting so that enabling them to achieve intended purposes more precisely.

### **5.2 Implication of the Study**

This study provides an understanding of different patterns or options available in applying budgeting techniques for different types of businesses operating under different organizational/ industrial contextual influences and social structural influences. In turn, it provides knowledge on the non-applicability

In summary, the study makes a considerable contribution to the empirical literature, to knowledge on budgeting practices and the application of MMR design for MA research. It also provides insights into business entities and policymakers with directions, evidence, and justifications, on the application of budgeting technique appropriately for different types of businesses operating under different organizational/ industrial contextual influences and social structural influences. Overall, this study provides directions to scholars with required evidence and

of certain patterns of budgeting for particular companies/industry sectors as far as considering their inherent nature of businesses and associated features and conditions. Accordingly, this research provides insight into the importance of exploring the appropriateness of certain aspects of budgeting, patterns of applying those aspects for particular companies/industry sectors.

Moreover, this study provides an understanding of the application of the MMR approach in MA research. This helps researchers understand means of presenting, analysing, and interpreting both quantitative and qualitative data more effectively in the context of MMR design. It also provides insights to researchers in determining how and at which point of interface to integrate core and supplemental components properly, to obtain the desired outcome in terms of meaningful interpretations and findings in the context of MMR design.

justifications to undertake further research on the phenomena under consideration.

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